

PDP-15 Systems

TC15 DECtape Control Maintenance Manual Volume 2

PDP-15 SYSTEMS
TC15
DECTAPE CONTROL
MAINTENANCE MANUAL
VOLUME 2

Copyright © 1971 by Digital Equipment Corporation

The material in this manual is for informational purposes and is subject to change without notice.

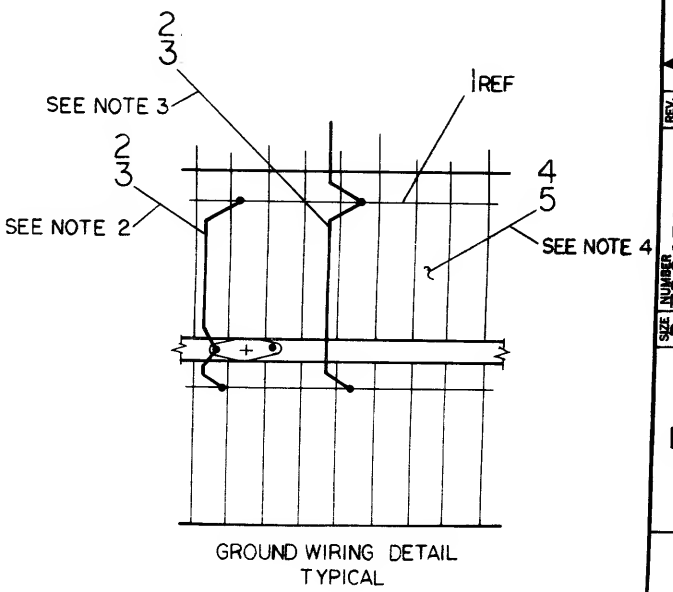
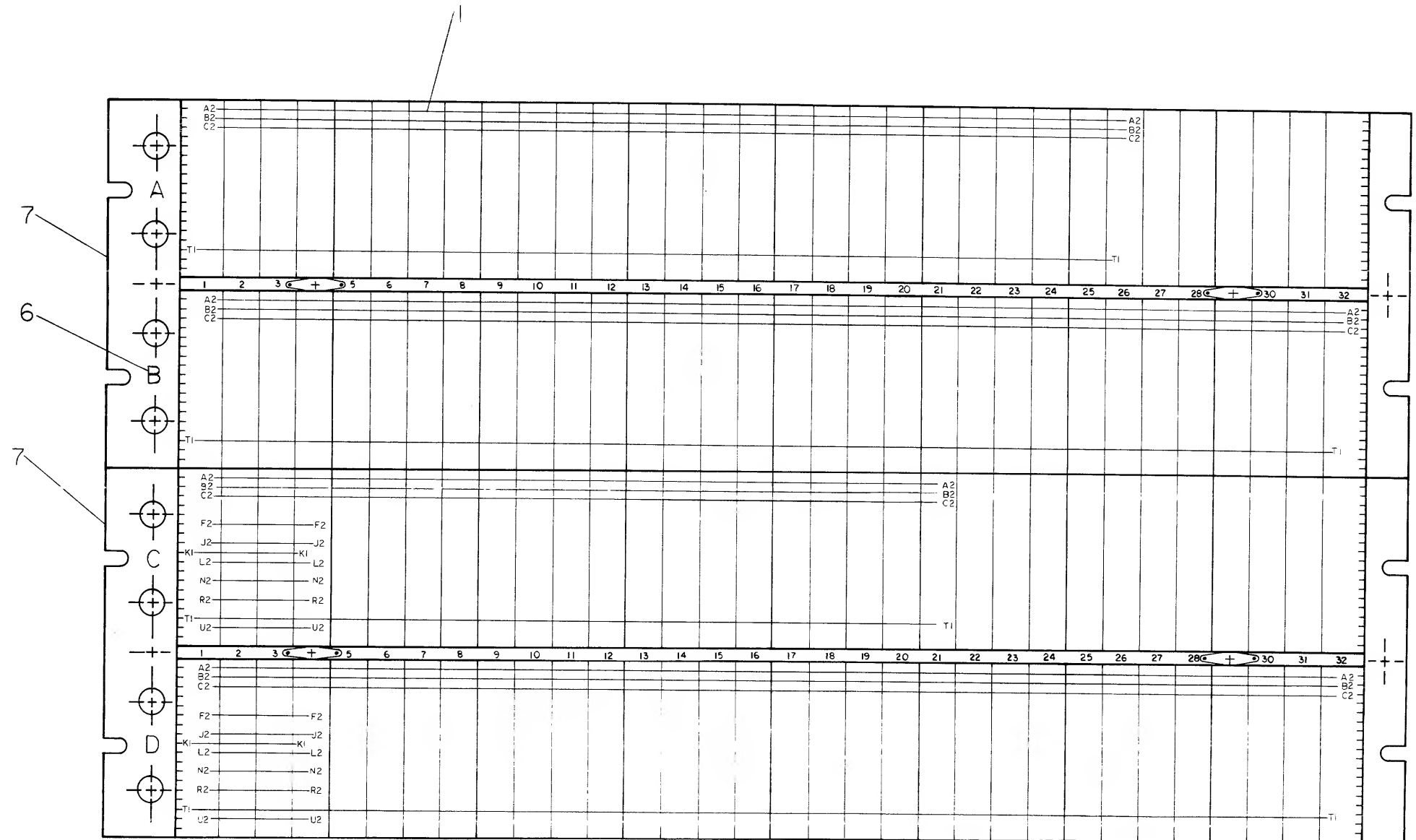
The following are trademarks of Digital Equipment Corporation, Maynard, Massachusetts:

DEC	PDP
FLIP CHIP	FOCAL
DIGITAL	COMPUTER LAB

This drawing and specifications, herein, are the property of Digital Equipment Corporation and shall not be reproduced or copied or used in whole or in part as the basis for the manufacture or sale of items without written permission.

REV. 1
SIZE NUMBER 3215
AD-700666-0-0

- NOTES:
1. CONNECTIONS ON ITEM NUMBER 1 & 2 TO BE LOCATED AND SOLDERED AT MINIMUM PRACTICAL HEIGHT ABOVE BLOCKS.
 2. ALL CONNECTOR BLOCKS TO BE GROUNDED TO GROUND LUGS AS SHOWN, 4 PLACES
 3. JUMPER GROUND BUSSING AS SHOWN, 8 PLACES.
 4. USE YELLOW WIRE (ITEM#4) FOR MACHINE WRAPPED AND BLUE WIRE (ITEM#5) FOR HAND WRAPPED WIRING.



REV.	CHG. NO.	REVISIONS
A	1	1/14/70
A	2	2/3/70
A	3	2/3/70
A	4	2/3/70
A	5	2/3/70
A	6	2/3/70
A	7	2/3/70
A	8	2/3/70
A	9	2/3/70
A	10	2/3/70
A	11	2/3/70
A	12	2/3/70
A	13	2/3/70
A	14	2/3/70
A	15	2/3/70
A	16	2/3/70
A	17	2/3/70
A	18	2/3/70
A	19	2/3/70
A	20	2/3/70
A	21	2/3/70
A	22	2/3/70
A	23	2/3/70
A	24	2/3/70
A	25	2/3/70
A	26	2/3/70
A	27	2/3/70
A	28	2/3/70
A	29	2/3/70
A	30	2/3/70
A	31	2/3/70
A	32	2/3/70

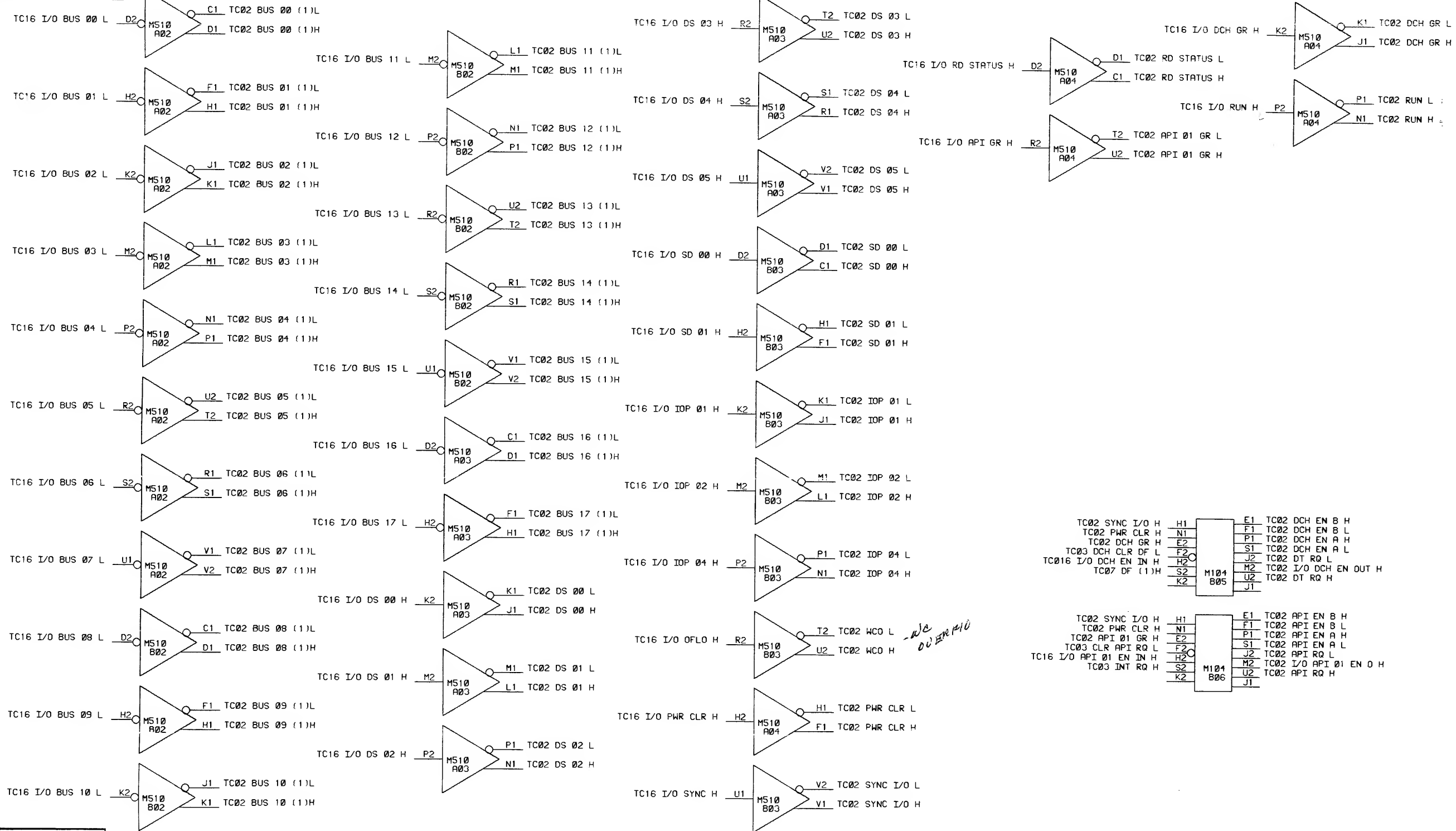
FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
TC15				
DO NOT SCALE DRAWING	DRN	DATE	1/14/70	
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES	CHK'D	DATE	1/14/70	
TOLERANCES	ENG.	DATE	2/3/70	
DECIMALS FRACTIONS ANGLES	PROJ. ENG.	DATE	2/3/70	
+ .005 = 1/64 = 0°30'	PROD.	DATE	2/3/70	
FINAL SURFACE QUALITY REMOVE BURRS AND BREAK SHARP CORNERS				
MATERIAL	NEXT HIGHER ASSY			
C-AD-700666-0-0				
FINISH	SCALE NONE			
SHEET 1 OF 1				
TITLE		digital EQUIPMENT CORPORATION		
WIRED ASS'Y (TC15)		MAYNARD, MASSACHUSETTS		
SIZE CODE		NUMBER		
D AD 7006701-0-0		REV. A		
DIST.				



QTY.		DESCRIPTION		PART NO.		ITEM NO.	
PARTS LIST							
FIRST USED ON OPTION/MODEL		DO NOT SCALE DRAWING		UNLESS OTHERWISE SPECIFIED			
		DIMENSION IN INCHES		TOLERANCES			
		DECIMALS FRACTIONS ANGLES		± .005 ± .1/64 ± 0°30'			
		FINAL SURFACE QUALITY		REMOVE BURRS AND BREAK SHARP CORNERS			
MATERIAL		NEXT HIGHER ASSY		DWG INDEX			
FINISH		D-UA-TC15-0-0		TC15			
		SCALE		SIZE CODE		NUMBER	
		SHEET 1 OF 1		DDI TC15-0-1		REV. E	
				DIST.			

REVISIONS		
CHK	CHANGE NO.	REV.
2	IC15-00001	A
D LAZUKA 1-1-70		
IC15-00005 B		
SWANSON 1-14-70		
IC15-00007 C		
1-14-70 10-23-70		
SWANSON		
IC15-00009 D		
1-14-70 3-20-71		
SWANSON		
IC15-00010 E		
1-14-70 5-12-71		
SWANSON 5-12-71		

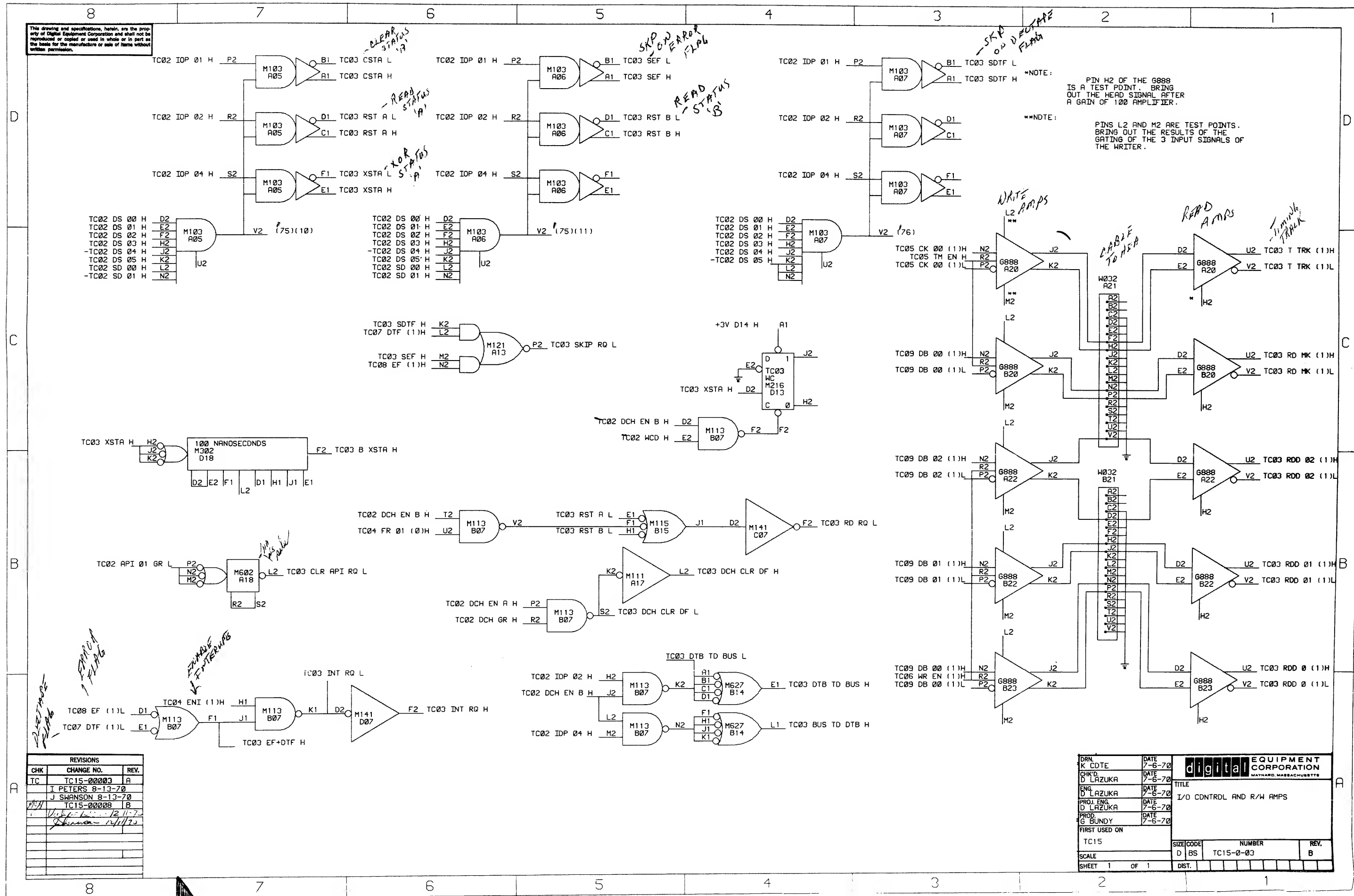
This drawing and specifications, herein, are the property of Digital Equipment Corporation and shall not be reproduced or copied or used in whole or in part as the basis for the manufacture or sale of items without written permission.



REVISIONS		
CHK	CHANGE NO.	REV.
MA	TC15-00008	A
12/14/70		
12/14/70		

DRN.	K COTE	DATE	7-6-70	digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS	
CHK'D.	D LAZUKA	DATE	7-6-70		
ENG.	D LAZUKA	DATE	7-6-70	TITLE I/O BUS RECEIVERS	
PROJ. ENG.	D LAZUKA	DATE	7-6-70		
PROD.	G BUNDY	DATE	7-6-70		
FIRST USED ON					
TC15				SIZE CODE	NUMBER
SCALE				D BS	TC15-0-02
SHEET 1 OF 1				DIST.	REV. A

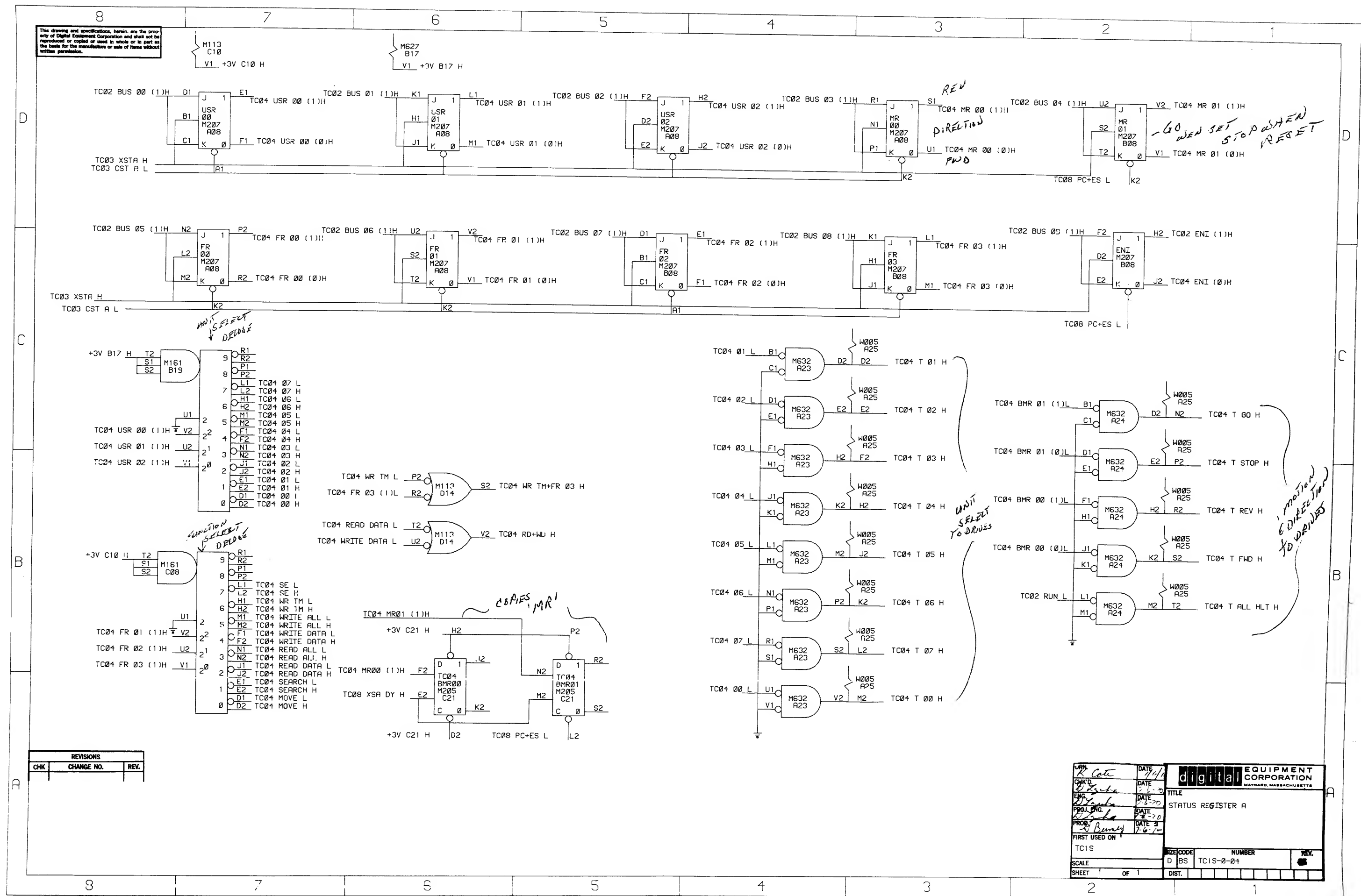
This drawing and specifications, herein, are the property of Digital Equipment Corporation and shall not be reproduced or copied in whole or in part as the basis for the manufacture or sale of items without written permission.

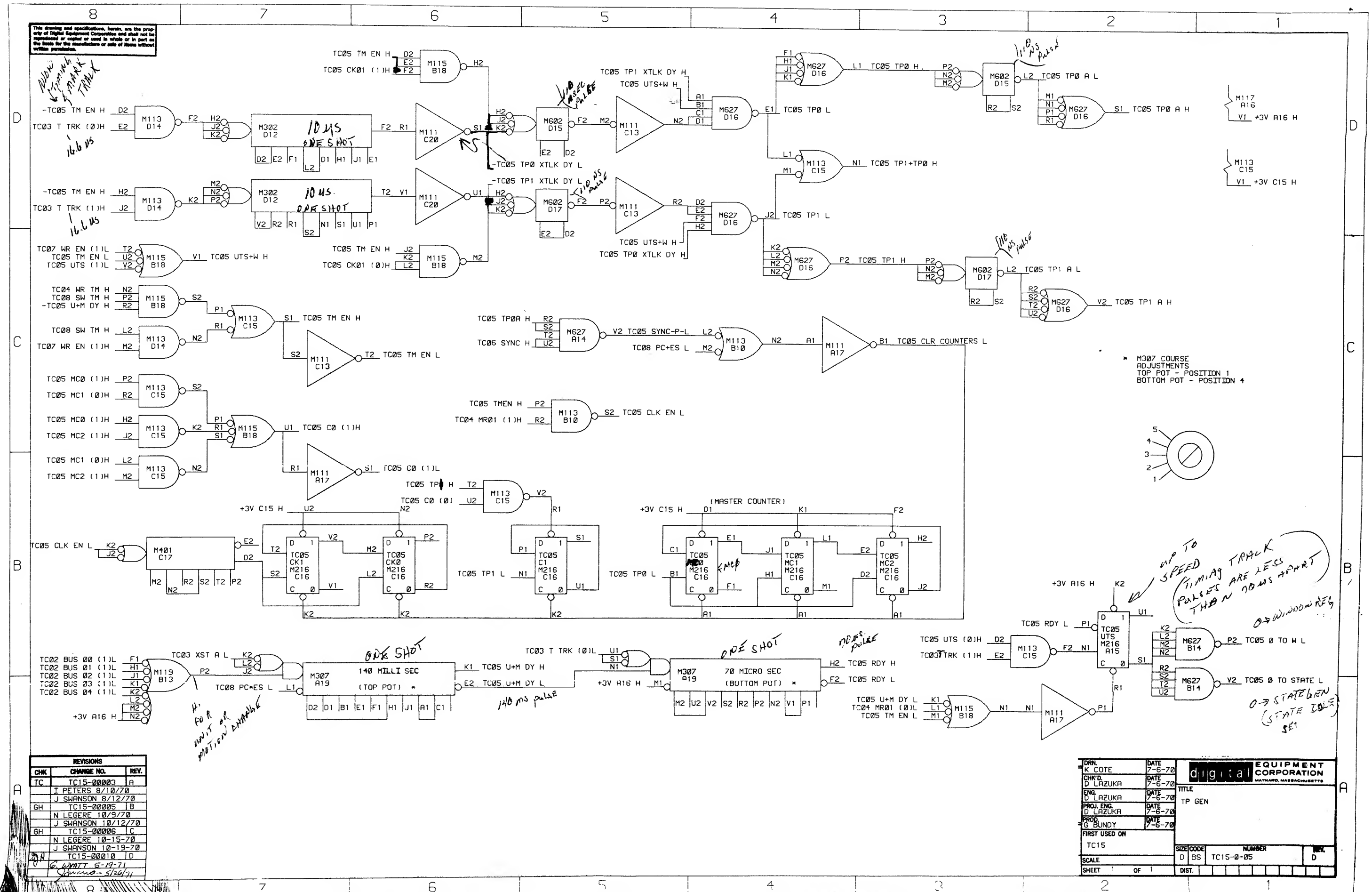


REVISIONS		
CHK	CHANGE NO.	REV.
TC	TC15-00003	A
	I PETERS 8-13-70	
	J SWANSON 8-13-70	
	TC15-00008	B
	12/1/70	
	12/1/70	

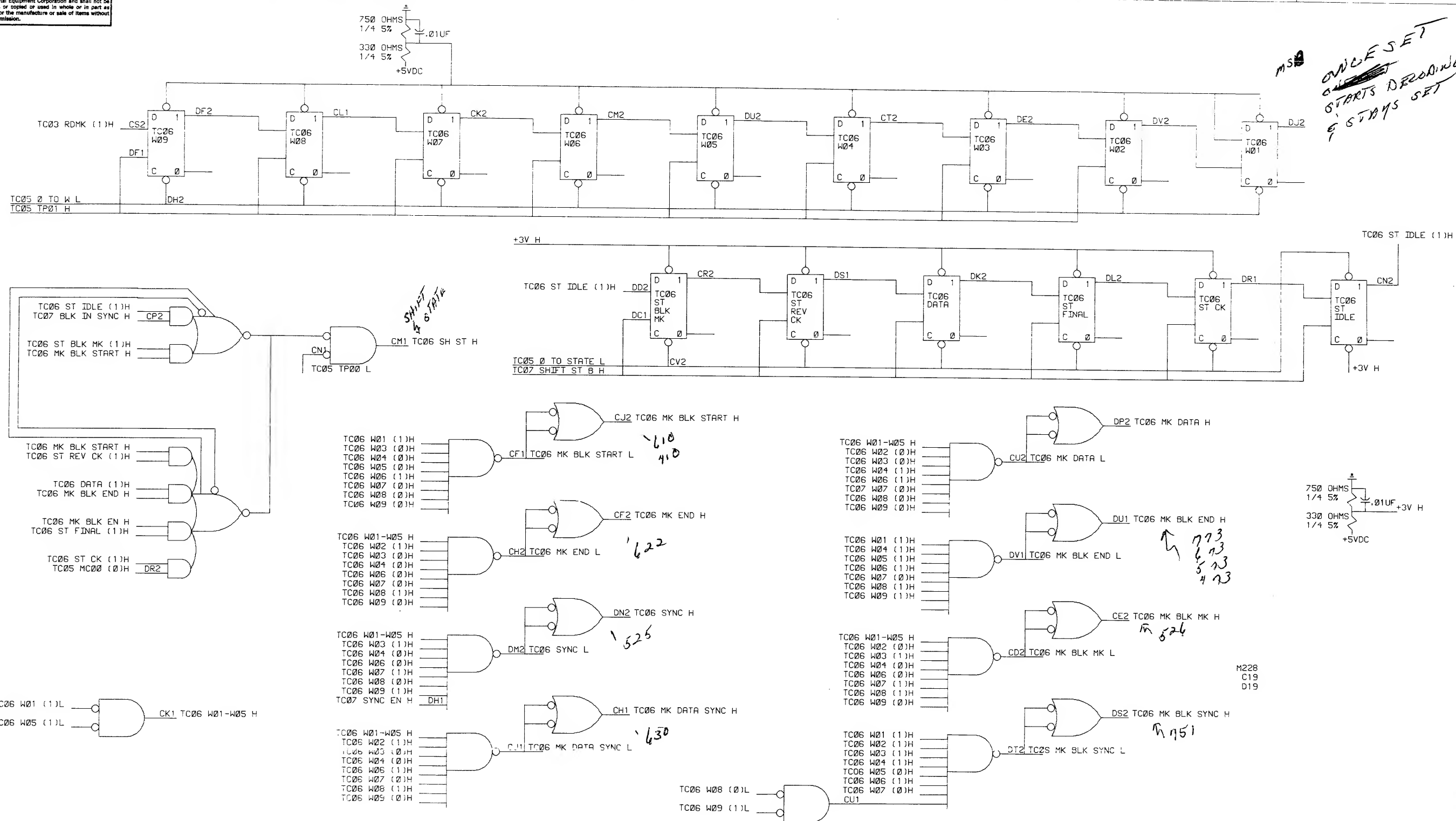
DRN	DATE	7-6-70
CHK	DATE	7-6-70
ENG	DATE	7-6-70
PROJ. ENG.	DATE	7-6-70
PROD.	DATE	7-6-70
FIRST USED ON		TC15
SCALE	SIZE CODE	D BS
SHEET 1 OF 1	DIST.	

digital EQUIPMENT CORPORATION	
MAYNARD, MASSACHUSETTS	
TITLE	
I/O CONTROL AND R/W AMPS	
NUMBER	TC15-0-03
REV.	B



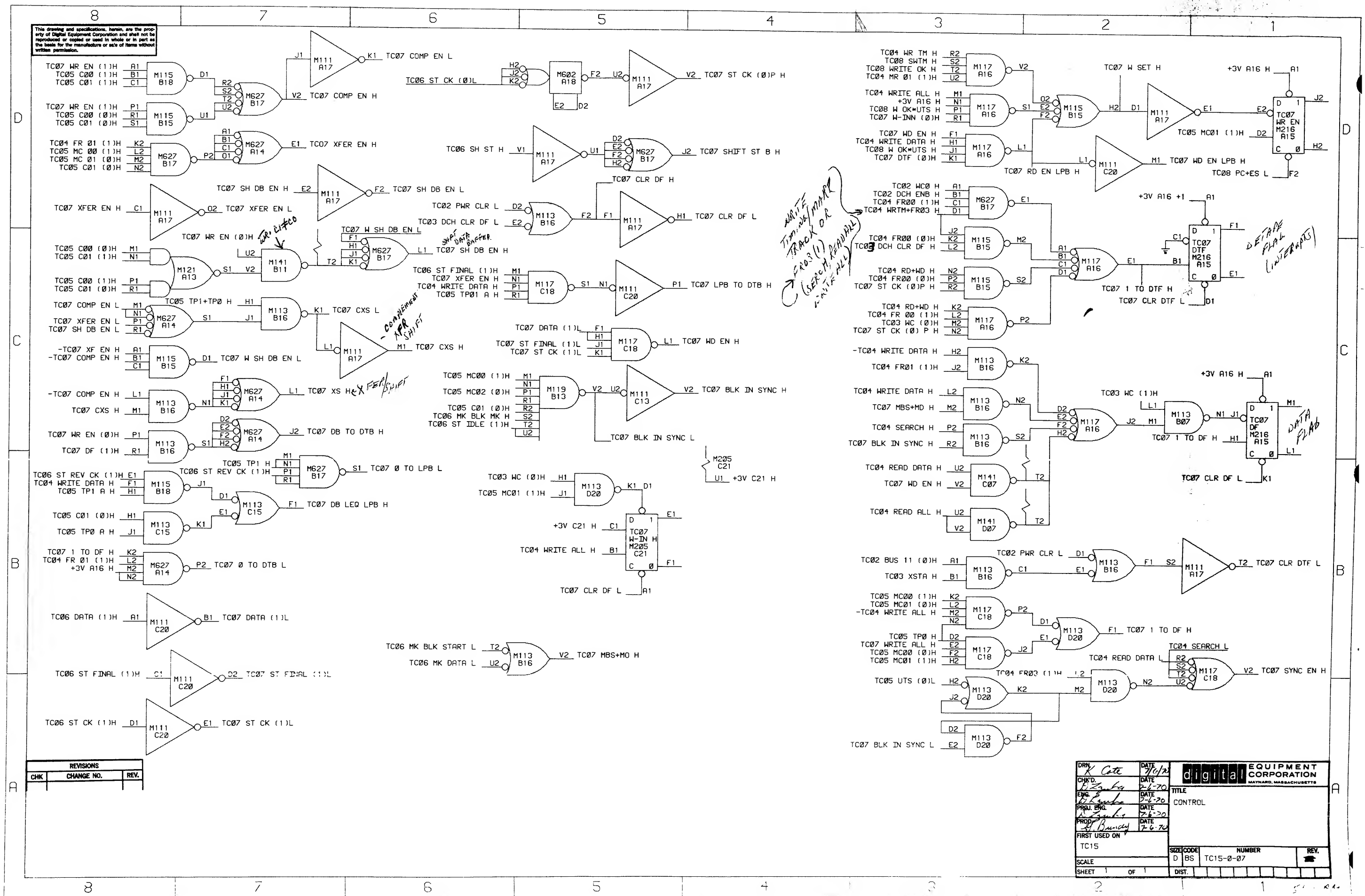


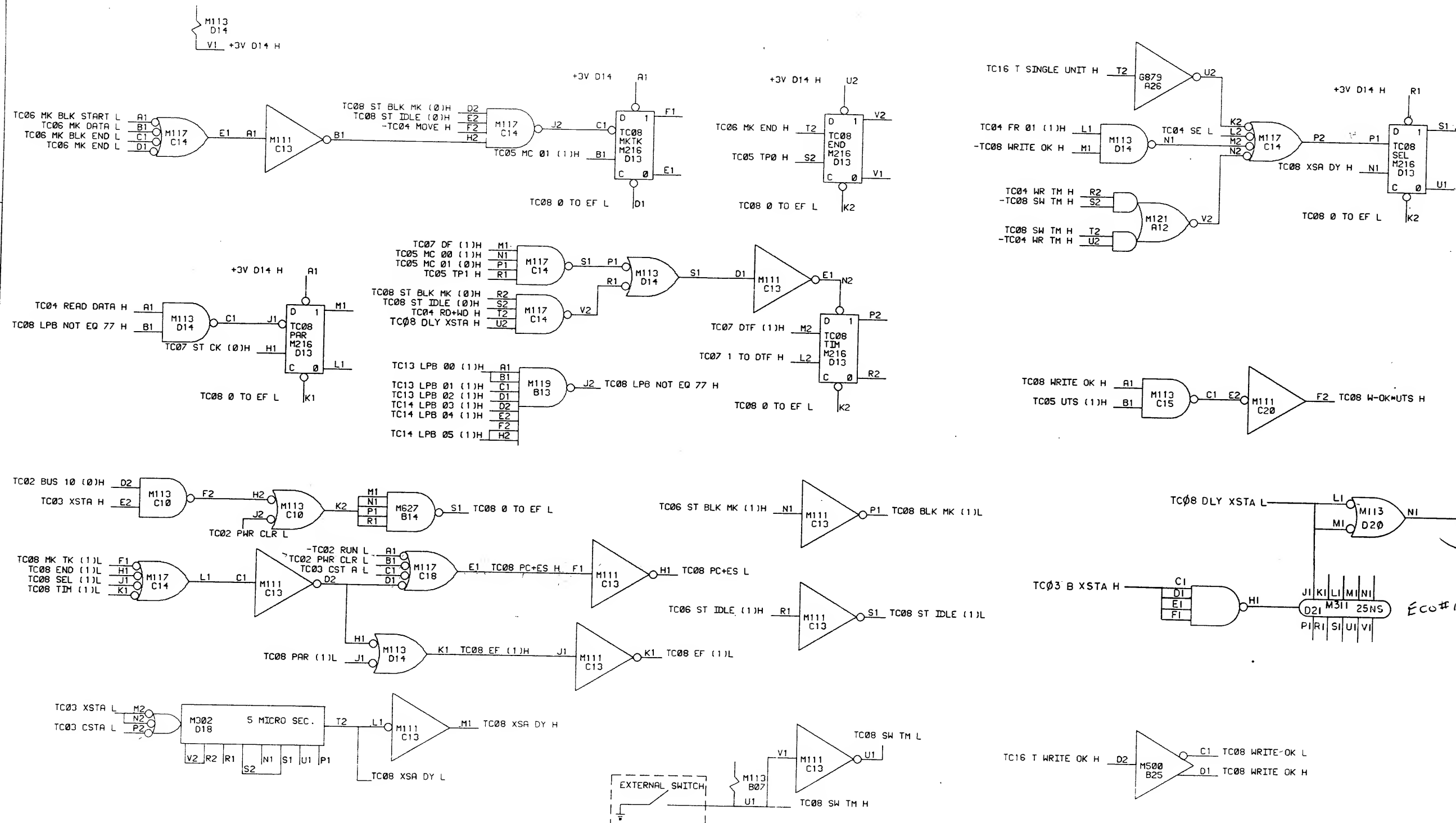
This drawing and specifications, herein, are the property of Digital Equipment Corporation and shall not be reproduced or copied or used in whole or in part as the basis for the manufacture or sale of items without written permission.



REVISIONS		
CHK	CHANGE NO.	REV.

DRAWN <i>R. Cate</i>	DATE <i>7/6/70</i>	digital		EQUIPMENT CORPORATION	
CHECK'D. <i>R. Cate</i>	DATE <i>7-6-70</i>			MAYNARD, MASSACHUSETTS	
ENG'G <i>R. Cate</i>	DATE <i>7-6-70</i>	TITLE			
PROJ. ENG.	DATE	MARK TRACK DECODE			
PROD. <i>J. Burley</i>	DATE <i>7-6-70</i>				
FIRST USED ON					
TC15					
SCALE		SIZE CODE	NUMBER		REV.
		D BS	TC15-0-06		
SHEET 1 OF 1		DIST.			

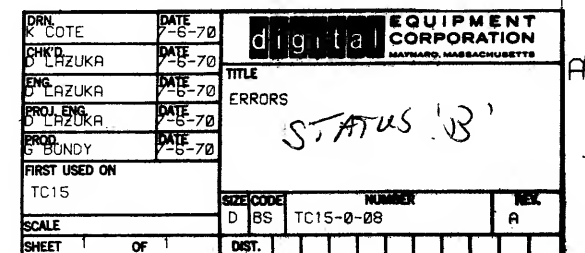




REVISIONS		
CHK	CHANGE NO.	REV.
FC	TC15-00003	
	TC15-00015	
	FITZGERALD	
	2-15-73	

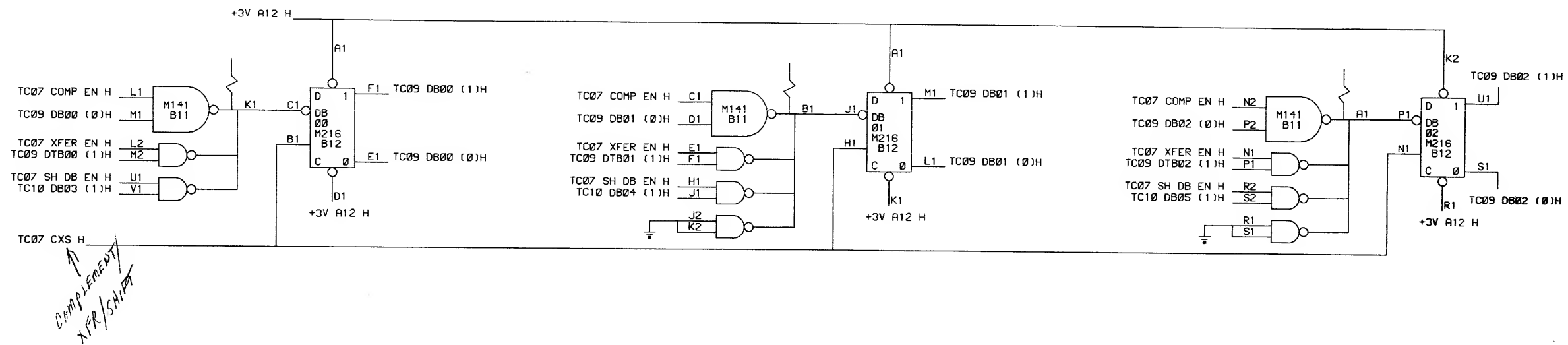
DRN.	DATE	digital		EQUIPMENT CORPORATION	
1 COTE	7-6-70			WATNARD, MASSACHUSETTS	
CHKD	DATE	TITLE		FRRONE	
1 RZUKA	7-6-70				
ENG	DATE				
1 RZUKA	7-6-70				
PROJ. ENG.	DATE				
1 RZUKA	7-6-70				
PROD.	DATE				
1 RZUKA	7-6-70				
1 RZUKA	DATE				
1 RZUKA	7-6-70				
FIRST USED ON		SIZE	CODE	NUMBER	REV.
1 RZUKA		1 RZUKA	1 RZUKA	1 RZUKA	1 RZUKA
SCALE	OF	1 RZUKA			
SHEET	OF	1 RZUKA			

REVISIONS		
CHK	CHANGE NO.	REV.
T.C.	TC15-00003	A
	1/10/70	
	2/2/70	

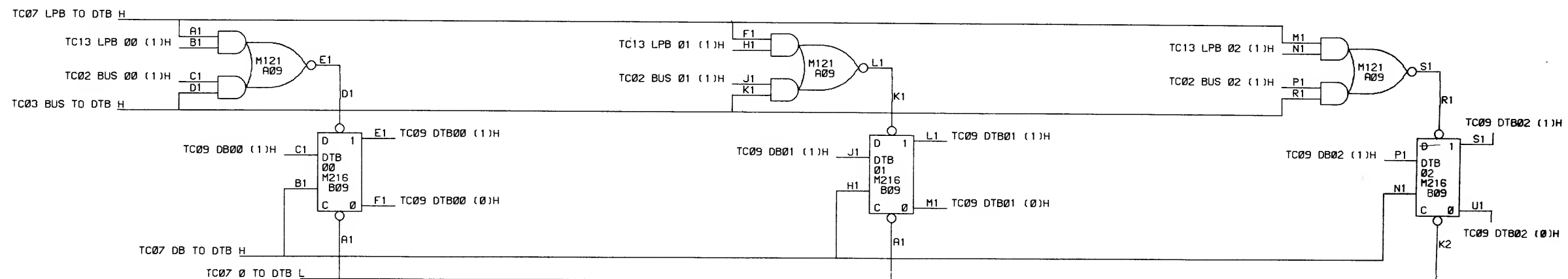


This drawing and specifications, herein, are the property of Digital Equipment Corporation and shall not be reproduced or copied or used in whole or in part as the basis for the manufacture or sale of items without written permission.

DATA BUFFER



DEL TAPE
BUFFER



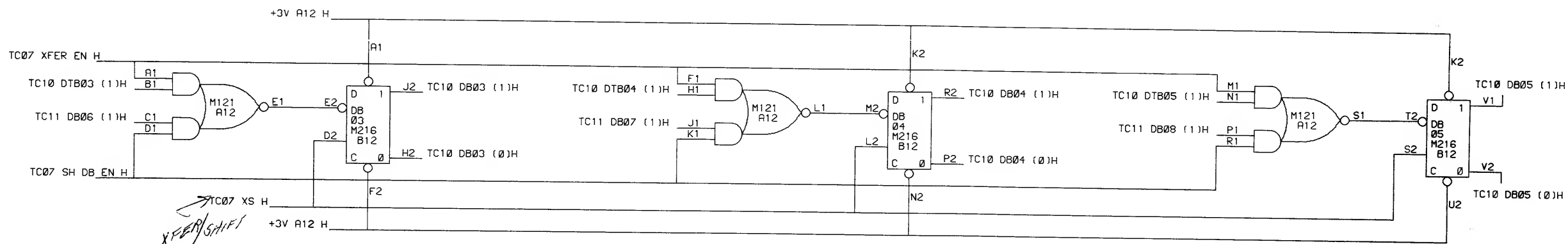
REVISIONS		
CHK	CHANGE NO.	REV.

DRN: K. Catz	DATE: 7/6/70	digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS
CHKD: D. Gandy	DATE: 7-6-70	
ENG: J. Gandy	DATE: 7-6-70	
PROD. ENG: J. Gandy	DATE: 7-6-70	
PROD: J. Gandy	DATE: 7-6-70	
FIRST USED ON: TC15		TITLE: DB00-02 DTB00-02
SCALE: SHEET 1 OF 1	SIZE CODE: D BS	NUMBER: TC15-0-09
DIST.:		REV.:

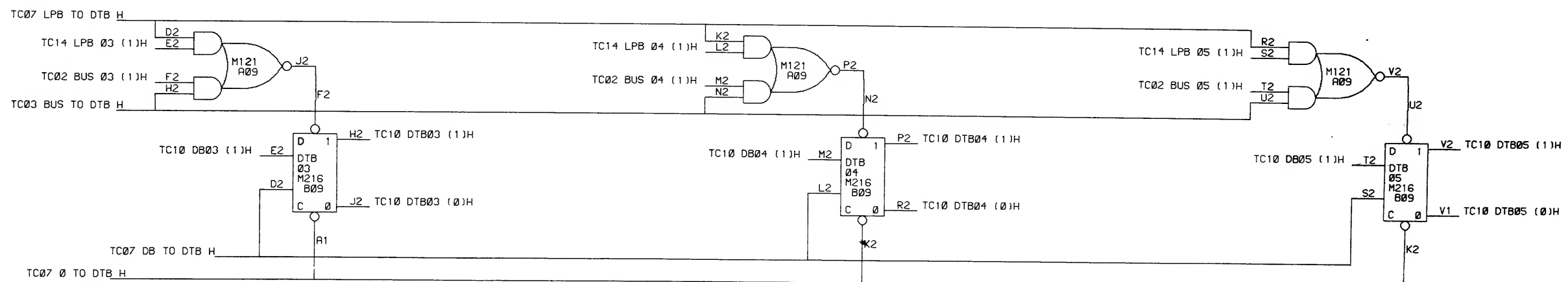
This drawing and specifications, herein, are the property of Digital Equipment Corporation and shall not be reproduced or copied or used in whole or in part as the basis for the manufacture or sale of items without written permission.

M121
A12
V1 +3V A12 H

DATA BUFFER



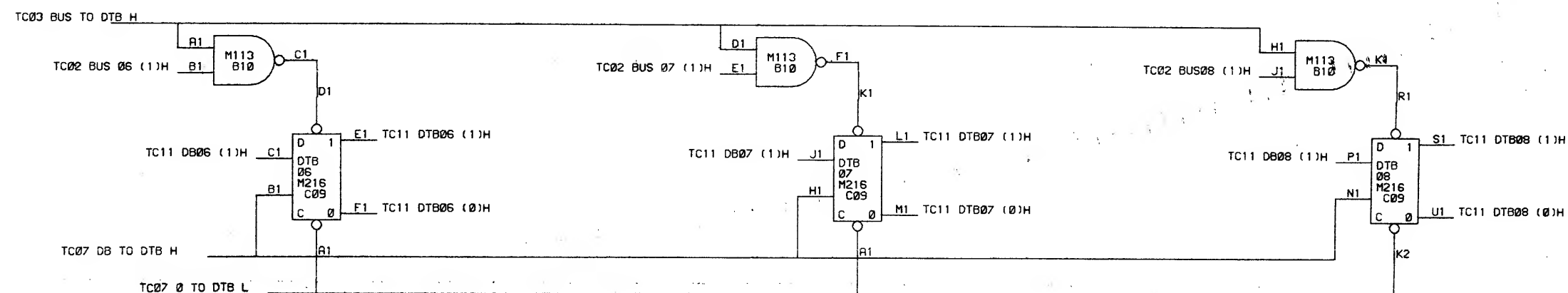
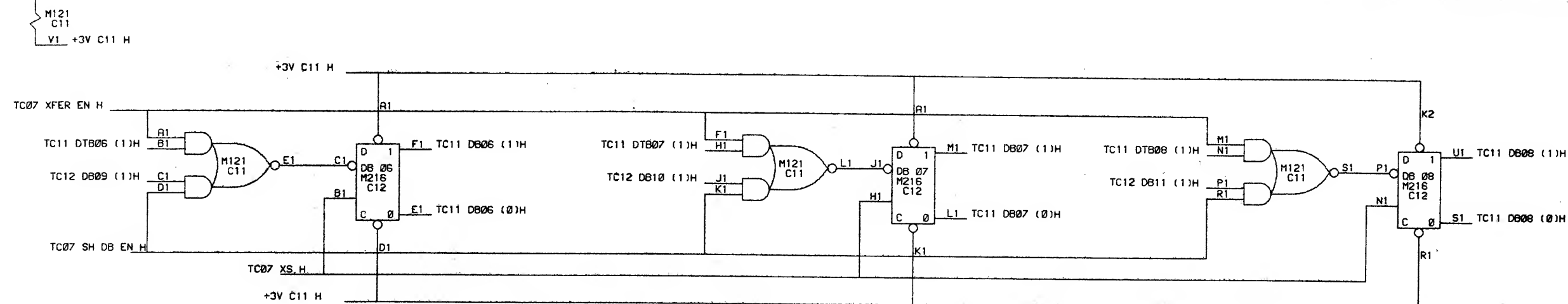
DEC TAPE BUFFER



REVISIONS		
CHK	CHANGE NO.	REV.

DRN K. Cote	DATE 7/6/77	digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS
CHK'D R. Zucka	DATE 7-6-70	
ENG R. Zucka	DATE 7-6-70	
PROD. ENG R. Zucka	DATE 7-6-70	
PROD. J. Bundy	DATE 7-6-70	
TITLE DB 3-5 DTB 3-5		
FIRST USED ON TC15		
SCALE SHEET 1 OF 1	SIZE/COO D BS	NUMBER TC15-0-10
DIST.		REV. ●

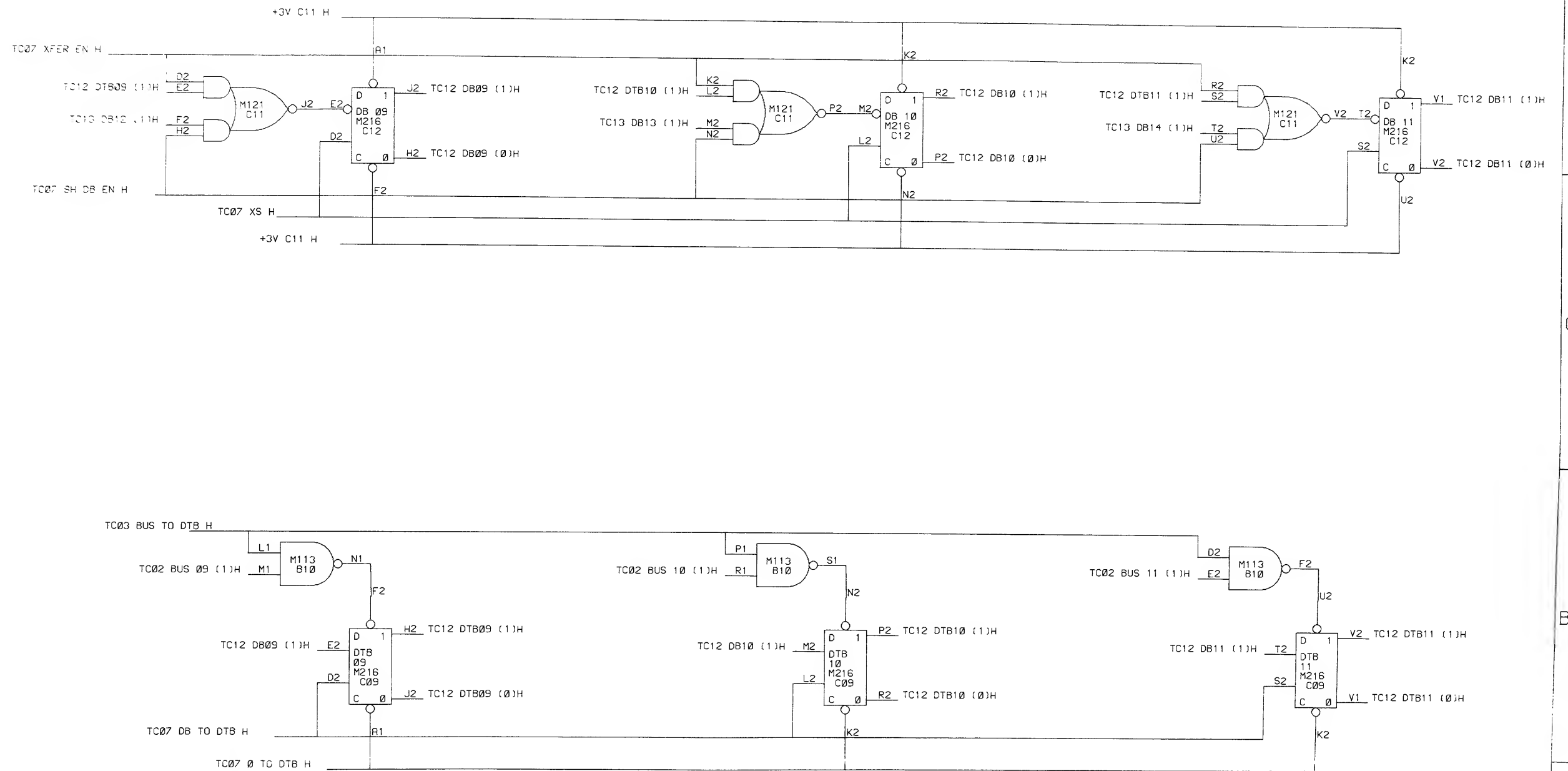
This drawing and specifications, herein, are the property of Digital Equipment Corporation and shall not be reproduced or copied or used in whole or in part as the basis for the manufacture or sale of items without written permission.



REVISIONS		
CHK	CHANGE NO.	REV.

DIRN <i>R. Cote</i>	DATE <i>7/6/70</i>	digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS	
CHWD. <i>L. G. G. G.</i>	DATE <i>7-6-70</i>	TITLE DB 6-8 DTB 6-8	
ENG <i>L. G. G. G.</i>	DATE <i>7-6-70</i>		
PRG. BRG. <i>L. G. G. G.</i>	DATE <i>7-6-70</i>		
PROD. <i>H. B. B. B.</i>	DATE <i>7-6-70</i>		
FIRST USED ON TC15	SIZE CODE NUMBER D BS TC15-0-11		
SHEET	OF		
SHEET	OF	DISC.	

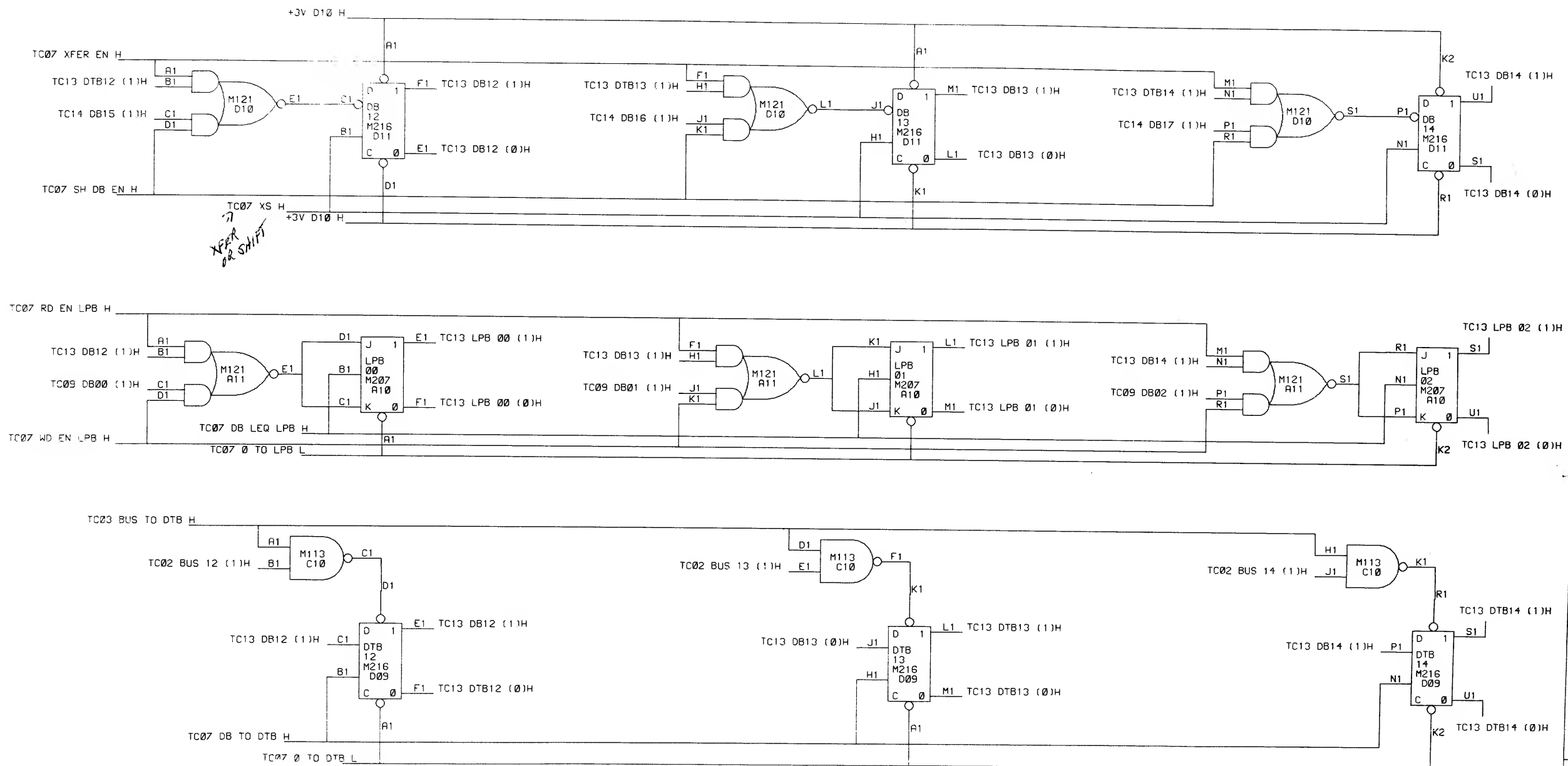
This drawing and specifications, herein, are the property of Digital Equipment Corporation and shall not be reproduced or copied or used in whole or in part as the basis for the manufacture or sale of items without written permission.



REVISIONS		
CHK	CHANGE NO.	REV.

DRN: <i>R. Galt</i>	DATE: <i>7/6/70</i>	digital EQUIPMENT CORPORATION WAYNARD, MASSACHUSETTS
CHK'D: <i>R. Galt</i>	DATE: <i>7-6-70</i>	
ENG: <i>R. Galt</i>	DATE: <i>7-6-70</i>	
PRJ. ENG: <i>R. Galt</i>	DATE: <i>7-6-70</i>	
PROD: <i>R. Galt</i>	DATE: <i>7-6-70</i>	
FIRST USED ON: TC15		TITLE: DB09-11 DTB09-11
SCALE: 1 OF 1	SHEET: 1 OF 1	SIZE CODE: D BS NUMBER: TC15-0-12 REV.: 1

This drawing and specifications, herein, are the property of Digital Equipment Corporation and shall not be reproduced or copied or used in whole or in part as the basis for the manufacture or sale of items without written permission.

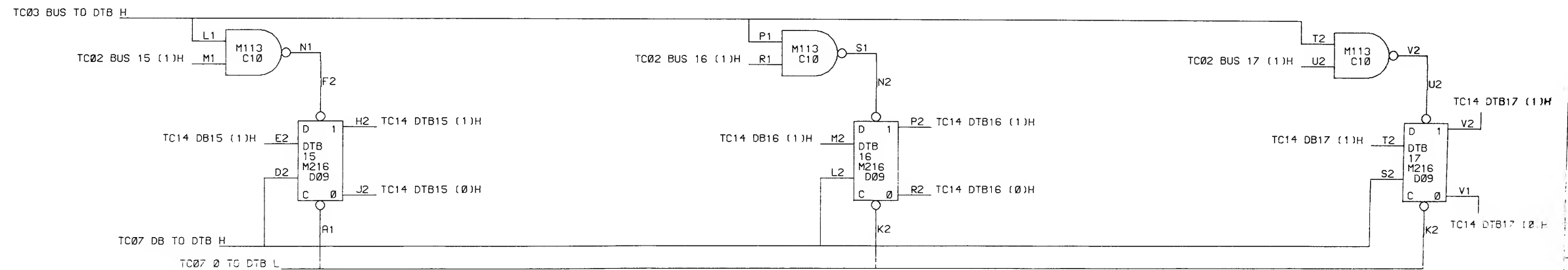
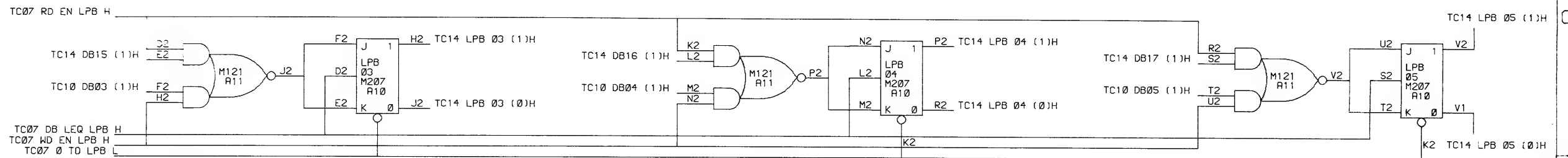
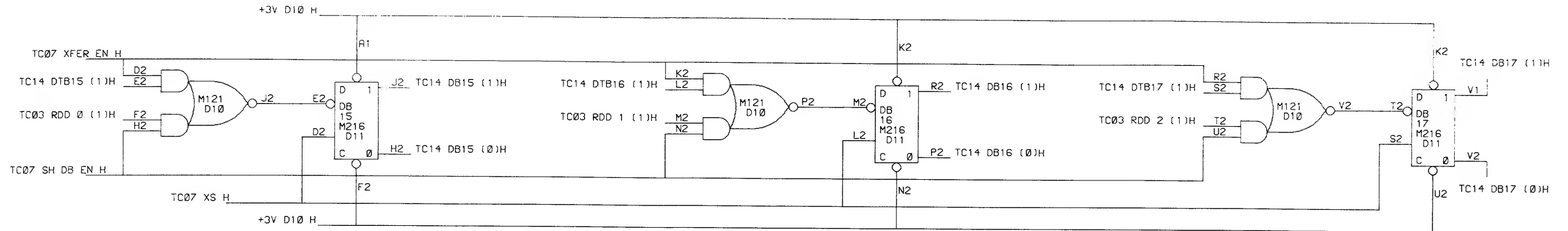


REVISIONS		
CHK	CHANGE NO.	REV.

DRN	DATE	digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS	
CHK'D	DATE		
ENG	DATE		
PRG'D	DATE		
PROG	DATE		
FIRST USED ON	DATE	TITLE	
TC15	7-6-70	DB 12-14 DTB 12-14	
SCALE	SIZE/CODE	NUMBER	REV.
SHEET 1 OF 1	D BS	TC15-0-13	
	DIST.		

This drawing and specifications, herein, are the property of Digital Equipment Corporation and shall not be reproduced or copied or used in whole or in part as the basis for the manufacture or sale of items without written permission.

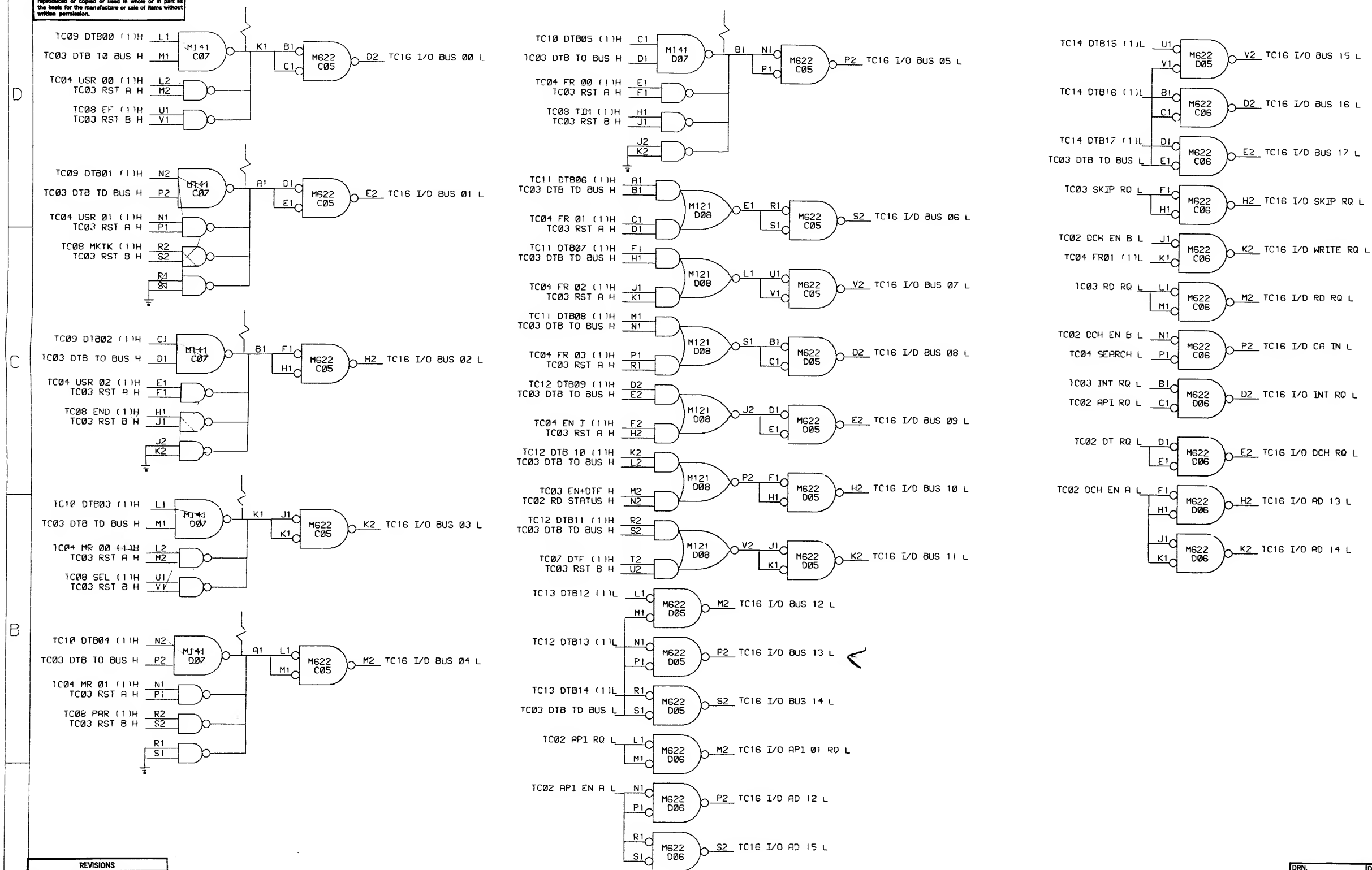
M121
D10
V1 +3V D10 H



REVISIONS		
CHK	CHANGE NO.	REV.

DRN K Cate	DATE 7/4/70	digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS TITLE DB 15-17 DTB 15-17
CHK'D V. Gaudin	DATE 7-1-70	
ENG V. Gaudin	DATE 7-6-70	
PRJ. ENG. V. Gaudin	DATE 7-6-70	
PROD. J. Dunitz	DATE 7-6-70	
FIRST USED ON TC15	SIZE CODE D BS	NUMBER TC15-0-14
SCALE	SHEET 1 OF 1	REV.

This drawing and specifications, herein, are the property of Digital Equipment Corporation and shall not be reproduced or copied or used in whole or in part as the basis for the manufacture or sale of items without written permission.

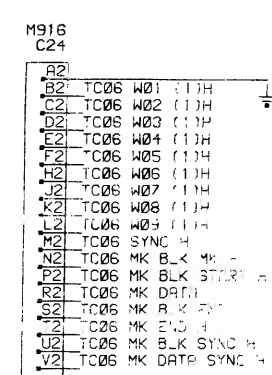
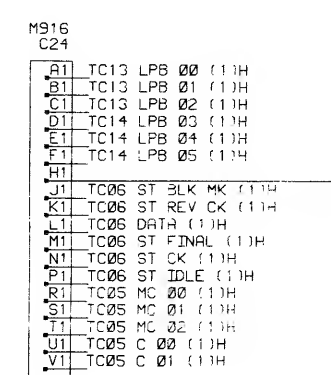
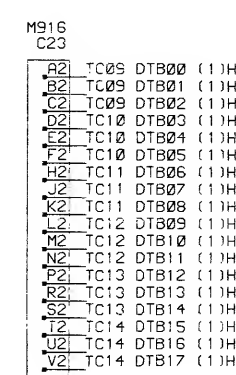
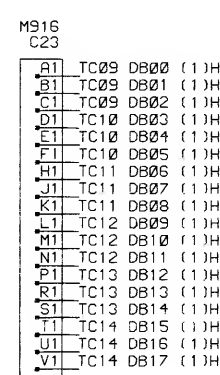
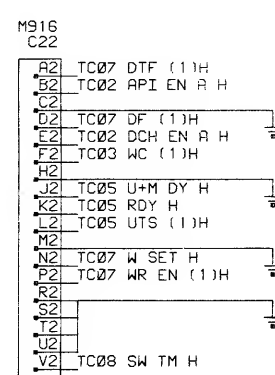
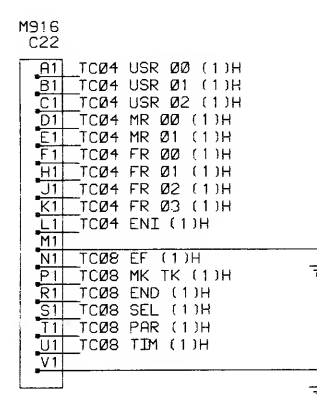
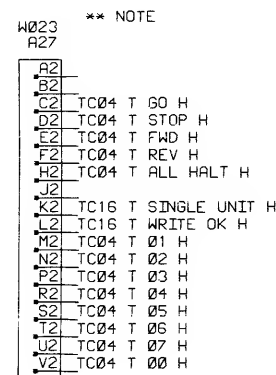
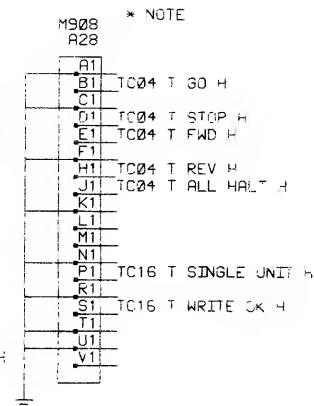
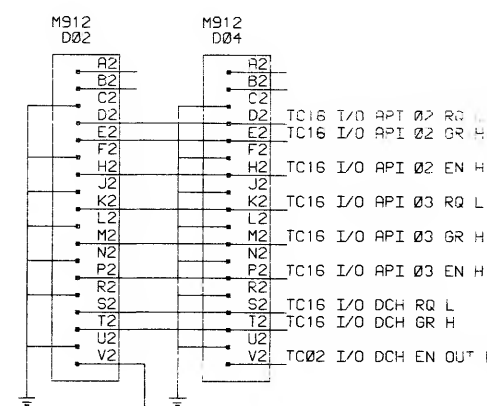
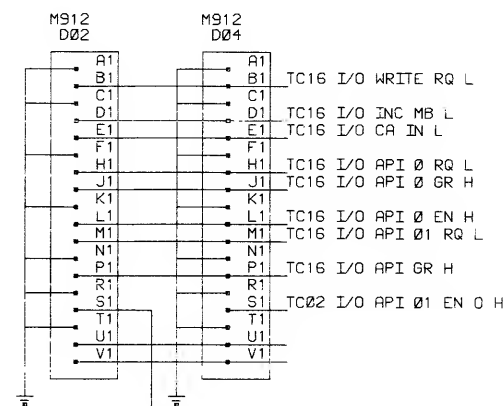
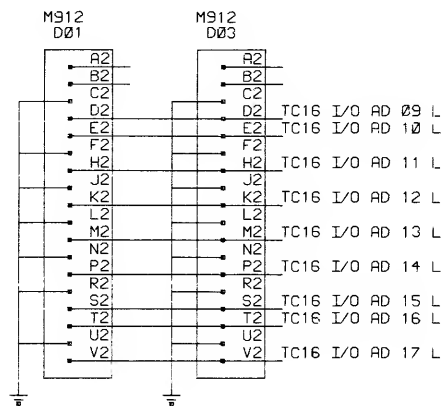
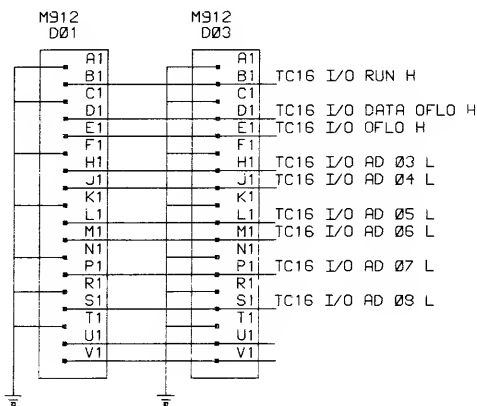
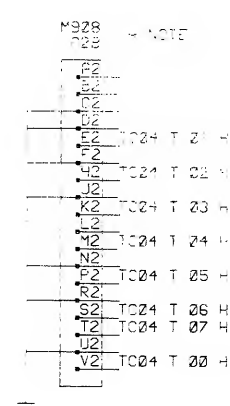
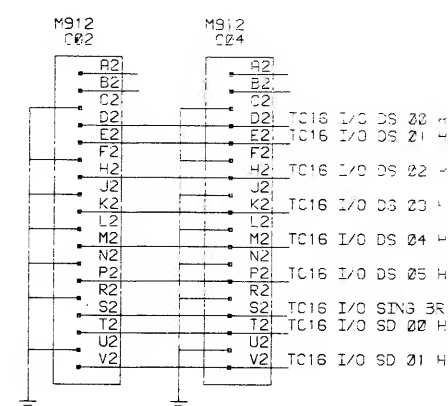
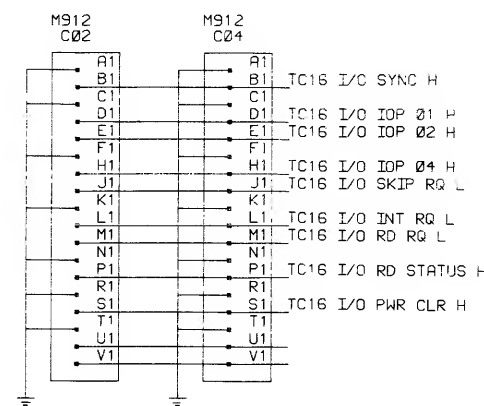
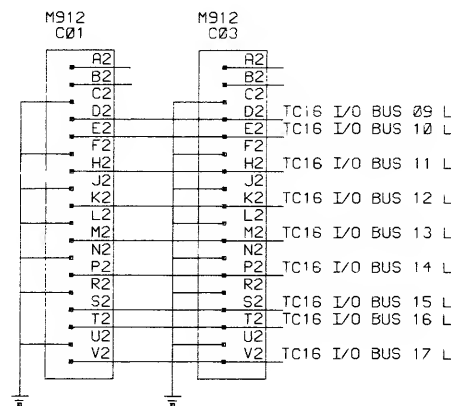
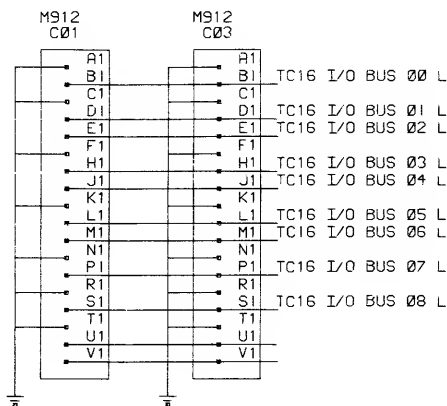


File P00.
30
For Word Count

REVISIONS		
CHK	CHANGE NO.	REV.
1/1	TC15-00008	A
K. S. ... 12/1/70		

DRN.	DATE	digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS	
K COTE	7-6-70		
CHK'D.	DATE	TITLE	
D. LAZUKA	7-6-70		
ENG.	DATE	BUS DRIVERS	
D. LAZUKA	7-6-70		
PROJ. ENG.	DATE	NUMBER	
D. LAZUKA	7-6-70		
PROD.	DATE	REV.	
C. BLUNDY	7-6-70		
FIRST USED ON		TC15	
SCALE	D BS	TC15-0-15	A
SHEET 1	OF 1	DIST.	

This drawing and specifications, herein, are the property of Digital Equipment Corporation and shall not be reproduced or copied or used in whole or in part as this basis for the manufacture or sale of items without written permission.



* TU56 ONLY
** TU55 ONLY

REVISIONS		
CHK	CHANGE NO.	REV.
GJH	TC15-00005	A
N LEGERE 10-9-70		
J SWANSON 10-9-70		
TC15-00008 B		
12/11/70		

DRN	K COTE	DATE	7/6/70	digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS
CHK'D	D LAZUKA	DATE	7/6/70	
ENG	D LAZUKA	DATE	7/6/70	
PROJ. ENG	D LAZUKA	DATE	7/6/70	
PROD.	G BUNDY	DATE	7/6/70	
FIRST USED ON				
TC15				
SCALE	D BS	NUMBER	TC15-0-16	REV. 8
SHEET 1	OF 1	DIST.		

This drawing and specifications, herein, are the property of Digital Equipment Corporation and shall not be reproduced or copied or used in whole or in part as the basis for the manufacture or sale of items without written permission.

8 7 6 5 4 3 2 1

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22

USAGE 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2

D A

USAGE 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2

C B

23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44

USAGE 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2

A B

USAGE 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2

B

REVISIONS
CHK CHANGE NO. REV.
TC15-00010 C
PROVIDED - RLDHAWN
SWANSON 5/26/71

FIRST USED ON OPTION / MODEL
TC15

DO NOT SCALE DRAWING
UNLESS OTHERWISE SPECIFIED
DIMENSION IN INCHES
TOLERANCES
DECIMALS FRACTIONS ANGLES
± .005 ± 1/64 ± 0°30'
FINAL SURFACE QUALITY
REMOVE BURRS AND BREAK SHARP CORNERS

MATERIAL
FINISH

DRN K CTE
CHK'D D LAZUKA
ENG D LAZUKA
PROJ. ENG D
PROD DATE
NEXT HIGHER ASSY
A-ML-TC15-0
SCALE NONE
SHEET 1 OF 2

DATE 7-2-70
DATE 7-6-70
DATE 7-6-70
DATE 7-7-70
DATE 7-7-70

digital EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

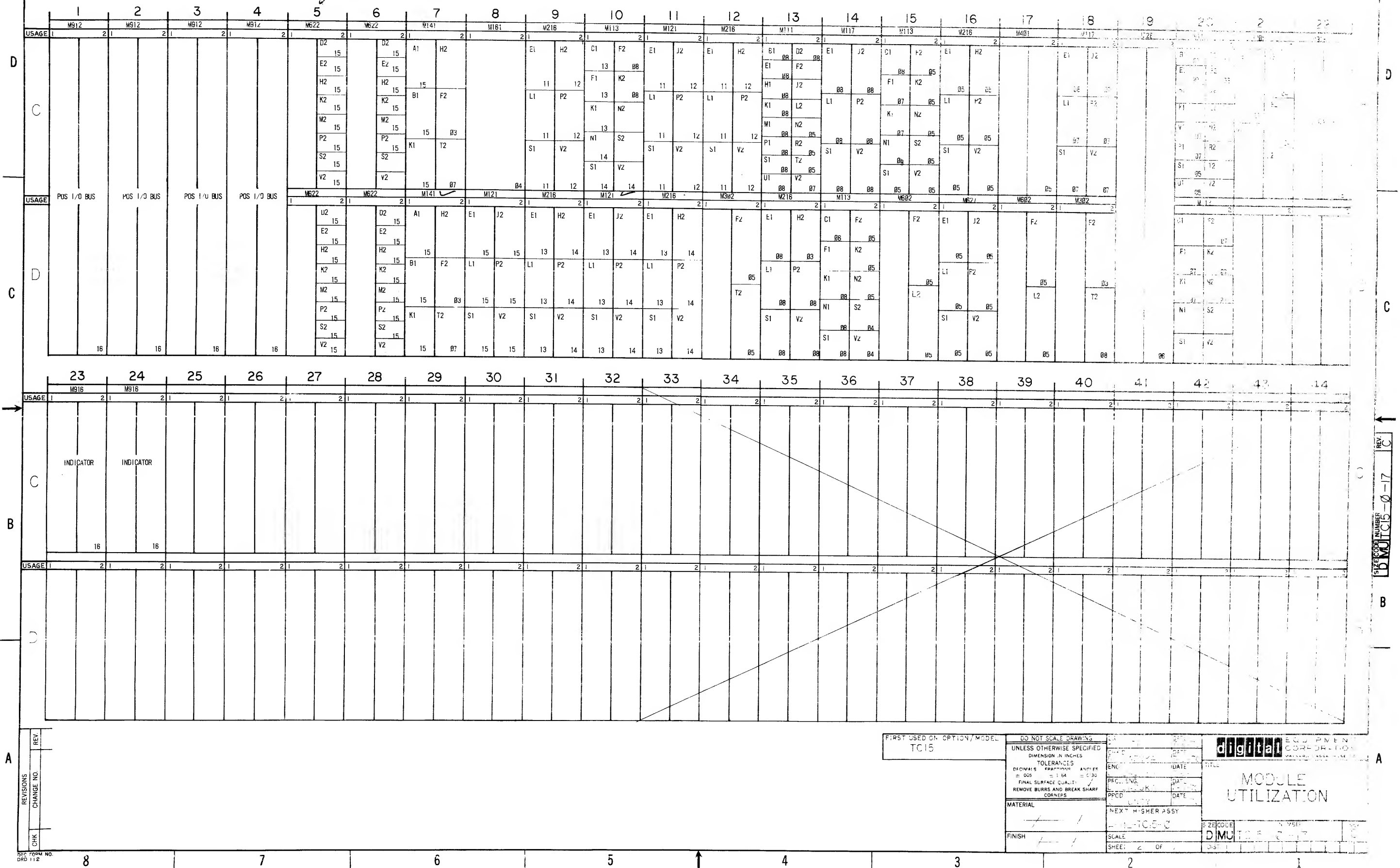
TITLE
MODULE UTILIZATION

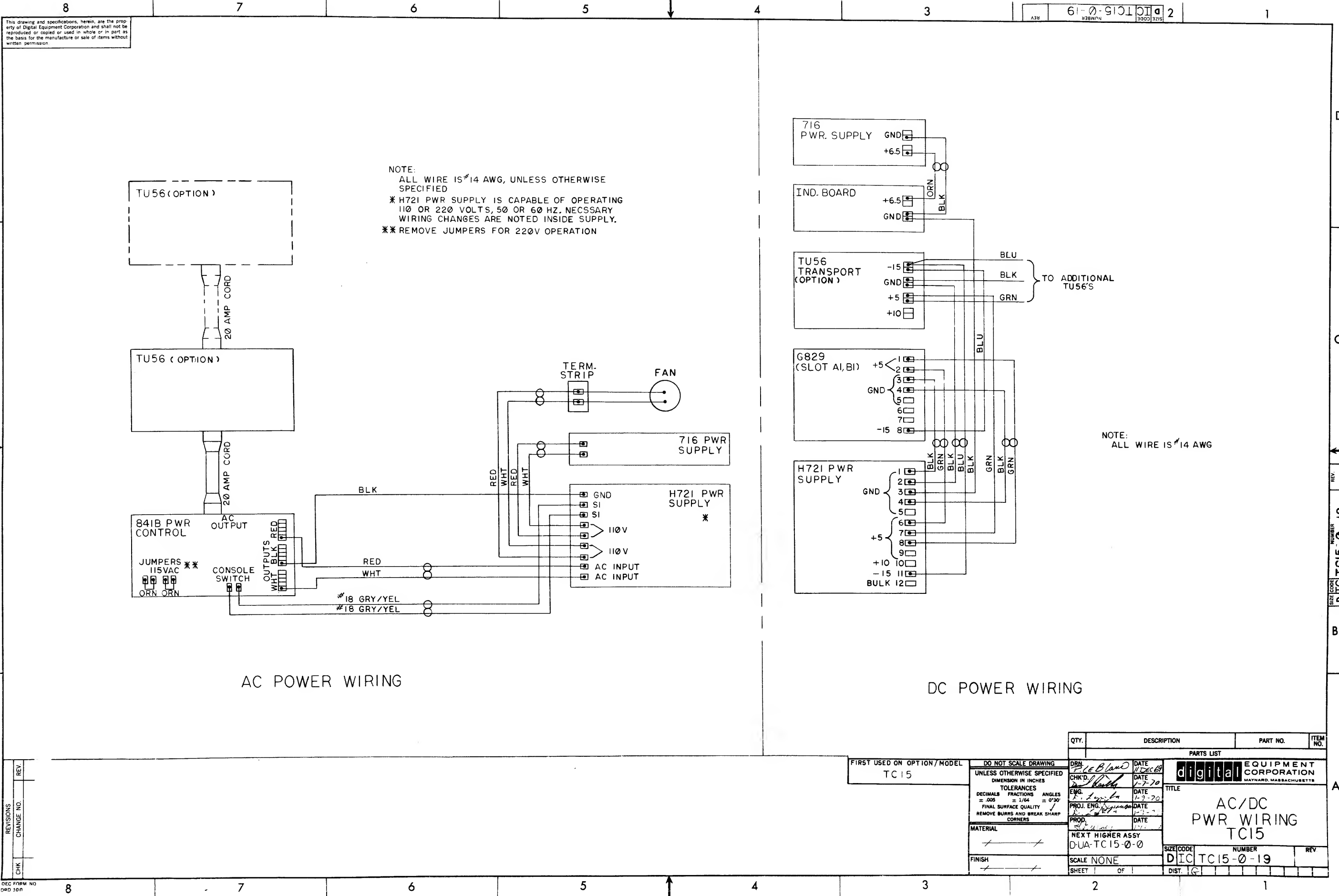
SIZE CODE NUMBER
DMUTC15-0-17

REV. C

8 7 6 5 4 3 2 1

This drawing and specifications, herein, are the property of Digital Equipment Corporation and shall not be reproduced or copied or used in whole or in part as the basis for the manufacture or sale of items without written permission.





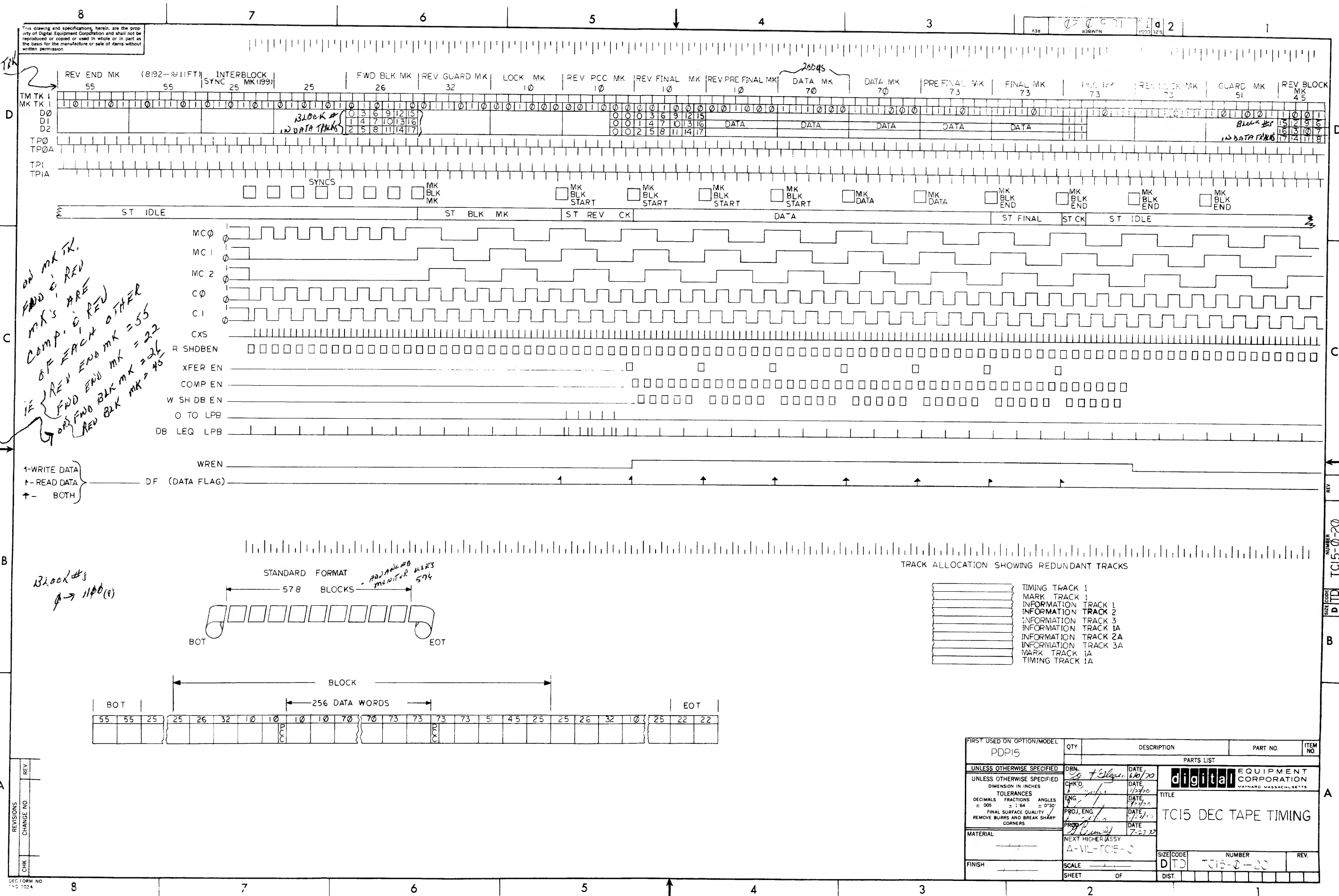
This drawing and specifications, herein, are the property of Digital Equipment Corporation and shall not be reproduced or copied or used in whole or in part as the basis for the manufacture or sale of items without written permission.

61-0-9101 TC15 2

QTY.	DESCRIPTION	PART NO.	ITEM NO.
PARTS LIST			
DRN	DATE	digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS	
CHK'D	DATE	TITLE	
ENG.	DATE	AC/DC PWR WIRING TC15	
PROJ. ENG.	DATE	SIZE CODE NUMBER	
PROD.	DATE	D1C TC15-0-19	
NEXT HIGHER ASSY		REV	
D-UA-TC15-0-0		SHEET	
SCALE NONE		DIST.	
OF			

REV	CHANGE NO.
CHK	

DEC FORM NO
D-101



C-0025
PDR MK TRK

210 110
9100 101

on MK TR.
FWD & REV
MK'S ARE
COMP. & REV
OF EACH OTHER
IF FWD END MK = 55
OR FWD BLK MK = 22
OR REV BLK MK = 45

1-WRITE DATA
1-READ DATA
1-BOTH

Block #s
→ 1100 (v)

FIRST USED ON OPTION/MODEL PDP15		QTY	DESCRIPTION	PART NO.	ITEM NO.
UNLESS OTHERWISE SPECIFIED		PARTS LIST			
UNLESS OTHERWISE SPECIFIED		DATE	digital EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS		
DIMENSION IN INCHES		DATE	TITLE		
TOLERANCES		DATE	TC15 DEC TAPE TIMING		
DECIMALS FRACTIONS ANGLES		DATE	REV.		
± .005 ± .001 ± .010		DATE	TC15-0-20		
FINAL SURFACE QUALITY		DATE	REV.		
REMOVE BURRS AND BREAK SHARP CORNERS		DATE	TC15-0-20		
MATERIAL		DATE	REV.		
NEXT HIGHER ASSY		DATE	TC15-0-20		
FINISH		DATE	REV.		
SCALE		DATE	TC15-0-20		
SHEET		DATE	REV.		